### SEGMENTING THE TRAVEL DESTINATION PRODUCT: A Q-METHOD STUDY OF BAY OF FUNDY SUMMER VISITORS' EXPERIENCE PREFERENCES<sup>1</sup>

This article uses Q method, an exploratory inductive empirical research method, to identify and describe segments of the Bay of Fundy regional destination travel product. Eight such segments are identified and described. Summer visitors to the Bay of Fundy share interest in experiencing a small number of iconic attractions, notably the Hopewell Rocks and whale watching, but their preferred vacation experiences differ sharply from each other. The eight segments differ in their orientation toward physical outdoor activities, cultural consumption, and preference for landscape experiences. Implications for product development are discussed.

### Introduction

The tourism and travel industry is one of the largest and fastest-growing industries in the world, and it is a central component in the economic development strategies of Atlantic Canadian provinces. To compete as travel destinations, places must position themselves in the tourism market by promoting images that targeted segments of visitors find attractive and by developing destination products that appeal to these visitors and that are consistent with destination identity (Kotler, Haider, and Rein, 1993). A growing research literature on travel destination images emphasizes the importance of such images in travel decision-making (Pike, 2002). Attractive destinations are ones that reflect "the feelings, beliefs, and opinions that an individual has about a destination's perceived ability to provide satisfaction in relation to his or her vacation needs" (Hu and Ritchie, 1993). Consumption values projected in destination images can be conceptualized in terms of the functional, social, emotional, epistemic, or conditional values (Tapachai and Waryszak, 2000) that are delivered in destination product mixes through bundles of goods and services. Visitor satisfaction with a destination product is determined by the "complex amalgam" of elements and experiences" derived from interaction with services providers, in which the visitor's assessment of the destination's natural and man-made environmental factors and service infrastructure affect his or her perceptions of destination quality and value (Murphy, Pritchard, and Smith, 2000). Destination branding (a relatively undeveloped concept in tourism and travel research) goes a step beyond destination marketing and image formation to the selection of a consistent mix of elements such as a "name, term, logo, sign, design, symbol, slogan, package, or a combination of these" in which the name of the place "is first and foremost reference" (Cai, 2002).

To develop a successful destination marketing and branding strategy it is fundamental to understand the characteristics of the target market. By studying the various factors that contribute to the visitor's choice of travel destination, businesses can learn to communicate effective subjective messages to each corresponding target group. Common bases for tourism market segmentation include demographic, socioeconomic, geographic, behavioral, and psychographic attributes (McIntosh, Goeldner, and Ritchie, 1995; Cooper et al., 1998). This paper contributes to travel destination image and destination market segmentation research through the use of an empirical exploratory research approach, Q method, to identify segments of tourism experience

<sup>&</sup>lt;sup>1</sup> Research reported here is part of a larger study of IT-enabled services in the tourism sector. We gratefully acknowledge the assistance of Bayoffundy.com and the Mariner's Inn in the design of the Q deck, and the financial assistance of the International Development Research Centre and the NSERC-SSHRC-NB Power-Xerox Research Chair in the Management of Technological Change at the University of New Brunswick – Saint John.

preferences among Bay of Fundy summer visitors. This exercise helps to identify and interpret underlying dimensions of the Bay of Fundy destination image among current summer visitors, and shows that visitors in different segments make important distinctions among the various elements of the Bay of Fundy destination product mix. We discuss the travel experience preferences expressed by these visitor segments and suggest specific ways in which stronger and more specialized travel products and services can be developed in the Bay of Fundy region to improve its positioning in the tourism marketplace and contribute to the competitiveness of the region as a travel destination. By grouping activities into product bundles that are marketed to specific segments, the tourism industry can increase revenues and provide travelers an above average experience that will motivate repeat visits.

Tourism plays an important role in New Brunswick's economy. Tourism generated about \$900 million dollars per year in 1999, 2000, and 2001, almost doubling since the beginning of the decade, and provided around 25,000 person years of employment (Tourism and Parks New Brunswick, 2002a). However recent figures show that the total number of visitors to the province of New Brunswick declined 2 per cent from 1999 to 2001 (Tourism and Parks New Brunswick, 2002a). Other Maritime provinces have also reported recent declines in tourism visitations. Nevertheless, the longer term outlook seems bright for attracting tourists from North America and Western Europe to the region through the presentation of destination products emphasizing particular mixes of environmental and cultural amenities combined with friendliness, safety, efficiency, value for money, and modern infrastructure.

For more than a decade, the Bay of Fundy has been promoted as a tourism destination by the Government of New Brunswick and more recently by the Bay of Fundy Product Club, now known as the Bay of Fundy Tourism Partnership. This collaborative marketing program is geared to development of sustainable tourism and quality travel experiences in the Bay of Fundy region. New Brunswick and Nova Scotia have also individually promoted tourism product development related to a more or less explicit Bay of Fundy destination image that includes coastal experiences, tides, whale watching, and cultural attractions with a Maritime flavor. The "Fundy Coastal Drive" is the most popular travel circuit on the New Brunswick side of the Bay among out-of-province visitors. Tourists to this region are "typically older, very well educated and very financially sound" (Tourism and Parks New Brunswick, 2002b: 4) from the United States, Ontario, or Quebec. In July and August nearly 19,000 such visitors stay overnight in paid accommodations on the New Brunswick side of the Bay of Fundy. Most are adult couples that spend around \$1,000 during their five-day stay in New Brunswick (ibid.). Non regional visitors (i.e. ones from outside the Maritimes) represent fully 87 percent of Fundy Coastal Drive visitors. Non regional visitors are very different from regional visitors, who tend to be younger persons traveling on shorter trips with families.

The destination image of the Bay of Fundy emphasizes the Maritime coast with "marine wonder" and "tides of adventure" themes and secondary Maritime cultural themes. Areas of visitor interest in regional travel products can be inferred from the Fundy Coastal Drive Consumer Profile, which reports that on a scale of one to ten, "eating fresh seafood" was ranked first or second by 61 percent of respondents. In descending order of expressed interest were saltwater beaches (ranked first or second by 44%), whale-watching (37%), museums or art galleries (28%), crafts/antiques/artwork (27%), lighthouses/covered bridges (26%), hiking/biking/walking trails (25%), wildlife viewing (23%), festivals/special events (21%), farmer's markets (19%), Acadian culture (16%), learning a new skill (15%), kayaking/canoeing (13%), fishing (13%), nightlife (11%), aboriginal culture (11%), golf(9%), and spas (7%) (Tourism and Parks New Brunswick 2002b).

### Methodology

How are interests in one activity related to interests in other activities? To answer this question we have to identify segments in the destination travel product. Many studies of visitor

travel activity preferences are based on rank-ordered lists of items that can be aggregated or correlated with visitor attributes. For example, Oh, Uysal and Weaver (1995) correlated travel motivations to identify bundles of products for distinct segments of travelers. In this paper we identify Bay of Fundy summer visitor tourism experience segments using Q method, in which respondents rank order items – in this case, photographs of attractions and visual icons that make up the Bay of Fundy's repertoire of destination components. Individual O sorts are factor analyzed to identify common patterns of rank-ordering, which represent shared view points regarding preferred experiences. These patterns are then interpreted in order to explain the respondents' viewpoints. The advantage of Q Methodology is that it permits the objective description of subjective experiences, allowing examination of "life as lived from the standpoint of the person living it" (Brown 1996). Q method provides a systematic and rigorous means of examining human subjectivity through the combination of qualitative and quantitative analysis. The methodology is applicable in many disciplines such as political science, marketing, psychology, sociology, and health care. For full descriptions of the method see McKeown (1988) or Brown (1980). A number of researchers have used Q methodology in landscape perception research (see the discussion in Fairweather and Swaffield 2001). However, the use of O sorted images in tourism destination research is relatively novel. We used O method to provide insights into the experiential preferences of summer visitors in the Bay of Fundy region.

The items to sort (Q deck) consisted of a "concourse" of photographs of 44 main tourist attractions in the Bay of Fundy region. The images were selected from a sample of several hundred with the help of Bay of Fundy travel industry experts in order to have a balanced representation of the possible tourist activities from the Bay of Fundy region in New Brunswick, Nova Scotia, and Maine. The 44 images are listed in Table 1. Only mainstream tourism activities or experiences that are commonly associate with the Bay of Fundy destination image were included in the formulation of the Q deck. Each image was printed on a laminated card along with a short description of the image. The deck was pretested on several individuals, resulting in several adjustments to eliminate duplication or images that respondents found difficult to identify.

Tourists were interviewed in a two-week period at the New Brunswick tourist bureau near Saint John, at the Mariner's Inn in Chance Harbour, and at various Bed & Breakfasts in the Saint John area. Tourists were requested to participate in a project aimed at developing specific tourist packages that would suit Bay of Fundy tourists in accordance to their interests. Those who agreed to participate were administered a questionnaire collecting socio-demographic and behavioral information, followed by the Q deck. Interviewees were asked to separate the 44 images of activities/experiences into three piles: on the right, images of Bay of Fundy vacation activities that were generally attractive; on the left, images of vacation activities that were generally unattractive, and finally, in the middle, vacation activities about which the interviewee felt neutral or indifferent. From the generally attractive images in the right hand pile, interviewees were asked to select the four images that represented activities they considered to be most attractive. Next, from the generally unattractive images in the left hand pile, interviewees were asked to select the four images that represented activities found to be most unattractive. The procedure was repeated for the remaining images until all cards had been sorted into seven categories, from "most attractive" to "least attractive", in the pattern shown in the typal Q sorts in Table 2. The interviewees were asked to review their selection and make any changes if desired. In total 42 interviews were conducted. Thirty four of the respondents were from Central or Western Canada or the United States, two were from Nova Scotia, and six were from the Middle East or South Asia.

### Results

Data were analyzed with *PCQ for Windows*, a commercial software program for Q method research. This software performs factor analysis and graphical and varimax rotation of the factors. A seven-factor varimax rotated solution was selected as providing the best fit with the data. In this solution, 36 sorts load significantly and uniquely on one factor at a 5% probability

level. Seven interviewees load significantly on Factors A, seven on B, five on Factor C, ten on Factor D, three on Factor E, three on F, and one on Factor G, as shown in Table 3. Four sorts are confounded (i.e. significantly loaded on more than one factor) and two do not load significantly on any factor: these were removed from the analysis. In this solution all seven eigen values are greater than 1.5 and 52 percent of the variance in the matrix is accounted for. Typal Q sorts (idealized sorts that show how a hypothetical individual loading 100% on the factor would sort the items) are shown for each factor in Table 2. Each sort represents an experience segment that expresses preferences about tourism attractions in the Bay of Fundy region. The following discussion describes each segment.

**Factor A, Outdoor exploring,** expresses preference for relatively active outdoor activities: biking, whale watching, bird watching, hiking, beach walking, trail walking, and kayaking, and for experience of local music, tides, and the Hopewell Rocks. The least attractive activities and experiences include highly organized, urban, or passive vacation activities: golfing, the city harbor, cruise ships, shopping, resort hotels, fog, sport fishing, summer cottages by the sea, and outdoor bars.

**Factor B, Boats and coasts,** prefers active, water-related vacation activities: sailing, whale watching, kayaking, cruise ships, coastal horseback riding, and biking. Interest is also expressed observing tides at the Hopewell Rocks and in some historical-cultural activities such as the Imperial Theatre and King's Landing Historical Theme Park. Factor B is least interested in consumption of picturesque coastal landscapes: foggy coastal environments, marine coastline experiences, views of fishing villages, urban harbors, beachcombing, seaside cottages, museums, and wildflowers and fossils.

Factor C, Coastal Environment Observers, expresses preference for active observational outdoor coastal experiences: beach walking, whale watching, bird watching, tide watching at the Hopewell Rocks, other tidal scenes, as well as for observation of charming outdoor natural or cultural scenes: Kingsbrae Public Gardens, the Reversing Falls, the Acadian Festival, and wild flowers, and tides. Coastal Environmental Observers avoid outdoor sports and other strenuous outdoor activities such as golfing, camping, horseback riding, sport fishing, biking, outdoor picnicking, rock-hounding, kayaking, and hiking.

**Factor D, the Complete Bay of Fundy Tourism Experience,** expresses strong interest in the primary Bay of Fundy visual icons: lighthouses, the Reversing Falls, the Hopewell Rocks, whale watching, and walking on the Fundy Trail, but is also has some interest in active exploratory activities such as horseback riding, sailing, the Joggins Fossil Cliffs, and Kingsbrae Public Gardens. The Complete Bay of Fundy Experience is defined primarily in terms of the prevailing images of the Bay of Fundy destination product that are found in tourism and travel brochures. This factor is the closest of the eight to a mass tourism segment in the region. Seekers of this experience do not visit the region in order to experience local cultural or historical experiences or outdoor recreational activities such as local music, camping, sport fishing, the Imperial Theatre, the Acadian Festival, or King's Landing Historical Theme Park. They are also uninterested in outdoor picnicking, marine coastal landscapes, and foggy environments.

**Factor E, Out and About, values** urban and cultural experiences and short coastal experiences accessible by foot: fine dining, old/historic Saint John, walking trails, coastal hiking, seafood dining, the Acadian Festival, historic inns, whale watching, and the Hopewell Rocks. Exponents of Factor E do not wish to partake of organized outdoor activities or experiences in formal cultural institutions: horseback riding, outdoor picnicking, Fossil Cliffs, Upper Clements Recreational Park, the marine coastline, King's Landing Historical Theme Park, the Saint John Museum, the ferry, and foggy coastal scenes.

Factor F+ (Social Recreation) and F- (Intimate Bay Experience), is the only bipolar factor, meaning that some individuals have opposite travel experience preferences (these individuals

were not travelling together!). The "positive" pole of Factor F (F+) expresses preference for group-oriented outdoor sports and activities in parklike settings: golfing, camping, outdoor picnicking, the Upper Clements Recreational Park, King's Landing Historical Theme Park, and for some relaxing restauration: fine dining, cruise ships, and outdoor bars. This segments expresses dislike of less organized, individually-oriented or "learning" vacation activities and experiences such as the Huntsman Marine Museum Touchtank, horseback riding, cottages by the sea, walking along the beach, kayaking, foggy scenes, sailing, wild flowers, the marine coastline, and shopping. One respondent, a 54 year old female from the southern United States, loaded negatively on Factor F, indicating a preference for the relatively informal and intimate coastal exploratory and shopping activities expressed in Factor F-. We label factor F- the "Intimate Bay Experience".

**Factor G, Coastal Culture,** expresses preference for picturesque regional landscapes consisting of coastal communities, fishing villages, lighthouses, regional travel icons (Reversing Falls, the Hopewell Rocks), and Maritime urban amenities: outdoor bars, seafood, and fine dining. We label this factor "Coastal Culture." Activities and experiences of least interest include walking trails, rock-hounding, shopping, the Huntsman Marine Museum Touchtank, cruise ships, summer cottages, picnicking, wild flowers, and beach swimming.

### Discussion

We have identified eight distinct visitor experience segments of the Bay of Fundy destination. Each prefers a specific mix of Bay of Fundy tourism experiences. Of the 44 images in the Q deck, those that were preferred most strongly across the most segments can be taken as Bay of Fundy icons that form the foundation of the current destination image. The Hopewell Rocks are the core icon. Visitors in six of the eight segments strongly prefer (by scoring the image +2 or +3) to visit this icon. Other central icons are whale watching (a preferred Bay of Fundy tourism experience in five of the eight segments), and the Fundy Trail, low tide/high tide landscapes, and the Reversing Falls (each preferred by three segments). All other experiences are strongly preferred by two segments or fewer.

By viewing tourism experience preferences through the lenses provided by the seven archetypal Q sorts in Table 2, it is not difficult to imagine the kinds of products and services that would appeal to tourists in each segment. Outdoor Explorers (Factor A) need a selection of outdoor equipment (bicycles, kayaks) to rent, a good trail infrastructure, maps, guides, and transportation to and fro. Outdoor Explorers are middle-aged people who are not interested in camping for long periods, and they have some interest in historical and cultural activities. They would probably respond to packages containing physically active but not too strenuous outdoor excursions interspersed with cultural relaxation and lodging in interesting places. In contrast, Coastal Environmental Observers (Factor C) need access to a range of organized and informal opportunities for beachwalking, tidal and wildflower observations, birdwatching, and visits to cultural events. Individuals seeking Coastal Environmental Observer experiences probably prefer to organize their own holidays but would appreciate using well-informed accommodations in a coastal environment as a base of operations.

Seekers of the Complete Bay of Fundy Tourism Experience (Factor D) seem to value experiencing activities and attractions that they see in the travel brochures. They seem to take a cafeteria approach to the enactment of their travel experience by seeking to sample everything once. Their interests are therefore broad and they can be tempted by visits to destination icons as well as by physical activities such as sailing and horseback riding, and by postcard coastal landscapes and public gardens. However they have no interest in the cultural or historical dimensions of the Bay of Fundy product. They are casual visitors with conventional tastes who drive to the region and plan as they go.

Out and About (Factor E) is most interested in the cultural and maritime urban amenities offered by the Bay of Fundy region. Factor E is the only segment expressing interest in historic Saint John, for example. Out and Abouters clearly see themselves spending significant amounts of time in the city, leaving for a coastal hike or whale observation and returning to dine or spend the evening in a historic inn or outdoor bar. This experience segment seems especially to appeal to Canadian couples in their forties and fifties. Out and Abouters may respond to customized travel planning services.

Factor F+ (Social Recreation) is similar to Factors E and G in its interest in urban bars and dining, but distinguishes itself by its focus on activities that take place in highly organized outdoor places – parks, golf courses, campgrounds, picnics, and cruises. This factor may express an amalgamation of the preferences of international student visitors and regional visitors and so should be interpreted with caution.

Factor G (Coastal Culture) is oriented toward experiencing four components of the Bay of Fundy destination product: the icons, maritime urban amenities (especially bars and dining), the coastal natural environment via bird- and whale watching, and the charming, quaint, or educational aspects of the Maritime built environment. Factor G is the only segment to express interest in covered bridges, fishing villages, museums, and ferries – the more subtle features of the regional cultural landscape that were not developed with visitors from outside the region in mind. Factor G probably expresses the preferred travel experiences of younger consumers who might be attracted to the region. Only one individual, an 18 year old female from Ontario, expressed this preference.

Factor F- represents a desire for intimate environmental and cultural exploratory experiences and purchasing opportunities in uncrowded, out of the way parts of the region. Two other females, respondents 12 and 30, also loaded significantly on Factor F- but their data were excluded from the analysis because of confounded loading. This factor may represent an important untapped segment and it should be further investigated. The interest in cottages may represent an opportunity to develop a long term repeat visitation relationship with Factor F-individuals. Factors G and F- visitors probably organize their own travel and cover a lot of territory by automobile in small groups or couples.

Individuals loading on Factor B (Coasts and Boats) are interested in the Bay of Fundy icons as well as activities having to do with boats and exploring coastal environments on bicycles or on horseback in sight of water. Water and proximity to water seem to be important to them. They are also interested in cultural events and accommodation in resort hotels, but not in educational or scientific aspects of the marine environment. Four of the six individuals loading on Factor B were from South Asia or the Middle East – a region that infrequently provides visitors to the Bay of Fundy. The salience of the water motif in their segment represents a vision of a travel experience that is not usually considered in this region. It may represent an unexploited market market opportunity.

Some images elicited little interest from any of the travel segments. In particular, foggy weather, relatively featureless marine coastlines, and scientific activities (the Huntsman Marine Lab) were considered to be relatively unattractive components of travel to the Bay of Fundy region. More generally, it is clear that the Bay of Fundy image as a travel destination is defined by a few key icons referring to the natural coastal environment. The region's cultural features are not stand-alone attractions, and its subtler cultural and educational offerings will require careful marketing to those visitor segments that appreciate and provide patronage to them.

### Conclusions

Bay of Fundy visitors differ in their orientation toward physical outdoor activities, cultural consumption, and preference for landscape experiences. An incipient mass tourism

segment (Factor D) seeks to consume the primary Bay of Fundy travel products. Other more discriminating segments emphasize physical encounters with coastal environments, interaction or passive observation of natural or cultural attractions, and urban amenities. Factors C, E, F-, and G are most interested in experiencing the more subtle environmental and cultural aspects of the Bay of Fundy destination product. Factor A seems to represent a middle-age version of outdoor adventure tourism that deserves to better understood. Further research is needed to interpret the experience preference of visitor segments and describe other more specialized segments that represent attractive targets. These include birdwatchers, kayakers, and individuals interested in educational experiences related to the coastal environment.

### References

Brown, Steven R., "Q Methodology and Qualitative Research," *Qualitative Health Research* 6 (1996), 561-567.

Brown, Steven R., *Political Subjectivity. Applications of Q Methodology in Political Science*, New Haven: Yale University Press, 1980.

Cai, Liping, "Cooperative Branding for Rural Destinations," *Annals of Tourism Research* 29 (2002), 729-742.

Cooper, Chris, John Fletcher, David Gilbert, and Stephen Wanhill, *Tourism: Principles and Practice, Edinburgh*: Addison Wesley Longman, 1995.

Fairweather, John R., and Simon R. Swaffield, "Visitor Experiences in Kaikoura, New Zealand: an interpretative study using photographs of landscapes and Q method," *Tourism Management* 22 (1993), 219-228.

Hu, Yangzhou, and J.R. Brent Ritchie, "Measuring Destination Attractiveness: a Contextual Approach," *Journal of Travel Research* 32(1993), 25-34.

Kotler, Philip, Donald H. Haider, and Irving Rein, Marketing Places, Toronto: The Free Press. 1993.

McIntosh, Robert W., Charles R. Goeldner, and J.R. Brent Ritchie, *Tourism: Principles, Practices, Philosophies*, New York: John Wiley.

McKeown, Bruce; Thomas, Dan, Q-Methodology, Los Angeles: Sage Publications, 1988.

Murphy, Peter, Mark P. Pritchard, and Brock Smith, "The Destination Product and its Impact on Traveller Perceptions," *Tourism Management* 21 (2000), 43-52.

Oh, Heung Chul, Muzaffer Uysal, and Pamela A. Weaver, "Product Bundles and Market Segments based on Travel Motivations," *International Journal of Hospitality Management* 14 (1995), 123-137.

Pike, Steve, "Destination Image Analysis – a review of 142 papers from 1973 to 2000," *Tourism Management* 23 (2002), 541-549.

Tapachai, Nirundon, and Robert Waryszak, "An Examination of the Role of Beneficial Image in Tourist Destination Selection," *Journal of Travel Research* 39 (2000), 37-44.

Tourism and Parks New Brunswick (2002a), *New Industry Tourism Industry Performance 2001*, unpublished document available at <u>http://www.gnb.ca/0397/documents/Tourism Industry Stats Report 2001.pdf</u>

Tourism and Parks New Brunswick (2002b), *Fundy Coast Drive Consumer Profile*, unpublished document available at http://www.gnb.ca/0397/Visitor\_Profiles/Fundy-e.pdf

Table 1: images and scores for each factor	facto	ors					
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Α	B	С	D	Ε	F	G
1.Local music playing in Upper Clements Recreational Park	2	-1	1	-3	1	0	-1
2.Golfing on the Algonquin golf course in St. Andrews	-3	-1	-3	-1	1	3	-1
3.Recreational Park showing Upper Clements in Digby	1	0	-1	1	-2	3	(
4. Camping in a public campground	1	1	-3	-3	-1	3	-1
5.Resort Hotel in St. Andrews	-2	1	-1	0	0	1	-1
6. The touchtank at The Huntsman Marine Museum	-1	-1	-1	0	0	-3	-3
7.Kingsbrae Public Gardens in St. Andrews	0	1	2	2	-1	-1	-1
8.Horseback Riding along the Fundy Coast	1	2	-3	2	-3	-3	-1
9.Beach swimming at Rockwood Park	1	1	0	0	-1	1	-2
10.Biking in Grand Manan	3	2	-2	1	1	-1	(
11.Seafood Dining in Saint John	0	0	1	0	2	0	2
12. The city harbour in Saint John	-3	-2	0	0	1	1	-1
13.Walking along the New River beach	1	-2	3	0	0	-3	-1
14.Fog shown on the New River beach	-2	-3	-1	-2	-3	-2	1
15.Sport fishing showing fly fishing	-2	0	-3	-3	-1	-1	(
16.Lighthouse at Green's Point in Maine	0	0	1	3	1	0	3
17.Sailing on the Bay of Fundy	1	3	1	2	0	-2	1
18. The Reversing Falls in Saint John	-1	1	2	3	0	-1	3
19.The Acadian Festival	1	1	2	-2	2	1	(
20.Wild flowers in Saint John (lupins)	0	-3	2	-1	0	-2	-2
21.Outdoor picnicking in Digby	0	0	-2	-2	-3	3	-2
22.Fine dining in upscale restaurant	0	-1	1	0	3	2	2
23.Cruise ship entering the Saint John Harbor	-3	2	0	1	0	2	-2
24.Historic Inn in St. Andrews	-1	-1	0	0	2	0	0
25.Old/Historic Saint John	-1	0	1	0	3	-1	0
26.The Imperial Theatre in Saint John	0	2	0	-3	1	1	0
27.The marine coastline in Pocologan	-1	-3	0	-2	-2	-2	(
28.Whale watching in St. Andrews	3	3	3	2	3	0	1
29.Lowtide/Hightide of the Bay of Fundy	2	-1	2	1	-1	1	2
30.Birdwatching showing the Atlantic Puffin	3	0	3	-1	-1	-1	2
31. The Historical Theme Park in King's Landing	1	2	0	-2	-2	2	0
32. The walking trails at the Fundy Trail Parkway	2	0	-1	1	3	0	-3
33.Summer cottages by the sea in Pocologan	-2	-2	-1	-1	-1	2	-2
34.Rock-Hounding at the St. Martins caves	0	1	-2	1	0	0	-3
35. Joggins Fossil Cliffs in Nova Scotia	1	-2	-1	2	-3	-1	1
36.Shops in Digby	-3	-1	1	0	0	-2	-3
37.Hopewell Rocks	2	3	3	3	2	1	3
38.Kayaking at the Fundy Trail	2	3	-2	-1	0	-3	0
39.Fishing Village in Deer Island	0	-3	0	-1	-1	0	2
40.Covered Bridge	-1	0	0	0	1	0	1
41.Outdoor bar on the Saint John Boardwalk	-2	0	-1	-1	1	2	3
42.Hiking on the Fundy Trail	3	1	-2	3	3	0	1
43.NB Museum in Saint John showing the marine room	0	-2	1	1	-2	-1	1
44. The Peninsula Princess Ferry	-1	-1	0	-1	-2	1	1

### Table 2: typal Q sorts

#### Factor A: Outdoor explorers

-3	-2	-1	0	1	2	3
2 12 23 36	5 14 15 33 41	3 6 18 24 25 27 40 44	7 11 16 20 21 22 26 34 39	4 8 9 13 17 19 31 35	1 29 32 37 38	10 28 30 42
			43			

Factor B: Boats and coasts

-3 -2 -1 0 1 2 3

-----

 
 29
 25
 19

 36
 30
 34

 44
 32
 42
 40 41

#### Factor E: Out and about

-3	-2	-1	0	1	2	3
8 14 21 35	3 27 31 43 44	4 7 9 15 29 30 33 39	5 6 13 17 18 20 23 34 36 38	1 2 10 12 16 26 40 41	11 19 24 28 37	22 25 32 42

Factor F+: Social recreation (Factor F-: Intimate Bay experience)

-3	-2	-1	0	1	2	3
6 8 13 38	14 17 20 27 36	7 10 15 18 25 30 35 43	24 28 32 34 39 40			2 3 4 21
			40 42			

Factor C: Coastal environment experiences

-3	-2	-1	0	1	2	3	
2 4 8 15	10 21 34 38 42	3 5 6 14 32 33 35 41	26 27	16 17 22	20	30	
			44				

Factor D: Complete Bay of Fundy experience

-3	-2	-1	0	1	2	3
1	14	2	5	3	7	16
4	19	20	9	6	8	18
15	21	30	11	10	17	37
26	27	33	12	23	28	42
	31	38	13	29	35	
		39	22	32		
		41	24	34		
		44	25	43		
			36			
			40			

Factor G: Coastal culture

-3	-2	-1	0	1	2	3
6 32 34 36	9 20 21 23 33	1 2 4 5 7 8 12 13	3 10 15 19 24 25 26 27 31 38	14 17 28 35 40 42 43 44		16 18 37 41

					loading on factor						
respondent	country	state/province	age	gender	Α	В	С	D	E	F	G
22	Canada	Quebec	44	Μ	0.76						
31	Canada	Nova Scotia	56	F	0.60						
17	Canada	Ontario	45	F	0.55						
19	Canada	Quebec	52	М	0.55						
33	U.S.	Virginia	56	F	0.50						
29	Canada	Quebec	37	Μ	0.49						
23	Canada	Quebec	38	F	0.41						
42	Dubai		22	Μ		0.76					
16	Canada	Ontario	17	F		0.75					
37	India	Bombay	74	F		0.73					
20	Canada	Ontario	17	Μ		0.71					
21	Canada	Ontario	21	F		0.63					
38	India	Bombay	78	М		0.61					
41	Dubai		21	F		0.40					
10	Canada	Ontario	52	М			0.64				
3	U.S.	Massachusetts	29	М			0.59				
36	U.S.	Delaware	45	F			0.57				
7	U.S.	New Hampshire	40	М			0.48				
9	Canada	Ontario	23	F			0.46				
27	U.S.	New Jersey	66	М				0.67			
26	U.S.	New Jersey	65	F				0.63			
34	Canada	Ontario	56	F				0.59			
	U.S.	Massachusetts	43	F				0.53			
	U.S.	Maine	74	F				0.52			
25	U.S.	Indiana	71	F				0.48			
28	U.S.	Maine	64	F				0.47			
5	Canada	Quebec	24	F				0.43			
6	U.S.	Maine	68	F				0.42			
13	U.S.	Pennsylvania	42	F				0.42			
15	Canada	Ontario	52	М					0.51		
	Canada	Alberta	41	F					0.45		
	Canada	Ontario	58	М					0.44		
	Dubai		21	F						0.57	
32	Canada	Nova Scotia	59	М						0.53	
	US	Texas	54	F						-0.41	
4	Canada	Ontario	18	F							0.62
	U.S.	Texas	32	М	0.60		-0.45				
	Canada	Quebec	36	F	0.56					-0.49	
	U.S.	Michigan	53	М	0.43		0.52		-0.40		
	Canada	Alberta	39	F			0.40			-0.52	
	Canada	Ontario	43	М							
	Dubai		20	F							

### Table 3: Respondents' factor loadings (only significant loadings shown)

### Segment 1: outdoor explorers







Hiking, Fundy Trail 42



Biking, Grand Manan 10





Birdwatching, Atlantic Puffin 30



Walking Trail, Fundy Trail Parkway 32



Kayaking, Fundy Trail 38



Hopewell Rocks 37



Lowtide/Hightide, Bay of Fundy 29

# Segment 2: boats and coasts

28





Sailing on the Bay of Fundy 17 Whale Watching, St.Andrews



Kayaking, Fundy Trail 38



Hopewell Rocks 37



Horseback Riding, Fundy Coast 8







Cruise, Saint John Harbor 23

<sup>3</sup> Historical Theme Park, King's Landing 31

Biking, Grand Manan 10

# Segment 3: the coastal environment

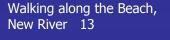
28



Birdwatching, Atlantic Puffin 30



Hopewell Rocks 37



Whale Watching, St.Andrews





Reversing Falls, Saint John (NB) 18

Kingsbrae Public Garden, St.Andrews 7 Wild Flowers, Saint John (NB) 20

Lowtide/Hightide, Bay of Fundy 29

# Segment 4: Complete Bay of Fundy Experience



Lighthouse, Green's Point (Maine) 16



Hiking,16 undy Trail 42



Reversing Falls, Saint John (NB) 18



Hopewell Rocks 37



Horseback Riding, Fundy Coast

8



Kingsbrae Public Garden, St.Andrews 7



Sailing on the Bay of Fundy 17

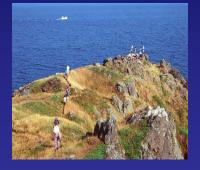


Joggins Fossil Cliffs 35

### Segment 5: out and about









Walking Trail, Fundy Trail Parkway 32

Fine Dining, Inn on the Cove Restaurant (SJ) 22

Old/Historic Saint John 25

Hiking, Fundy Trail 42



Historic Inn, Windsor House (St. Andrews) 24

Seafood Dining, Billy's Seafood Company Restaurant 11



Hopewell Rocks 37



Acadian Festival 19

# Segment 6: social recreation









Golfing, Algonquin Golf Course (St. Andrews) 2

Recreational Park, Upper Clements (Digby, NS) 3

Outdoor Picknicking, Digby (NS) 21

Camping, Public Campground 4



Historical Theme Park, King's Landing 31



Outdoor Bar, Saint John Boardwalk 41



Fine Dining, Inn on the Cove Restaurant (SJ) 22



Cruise, Saint John Harbor 23

# Segment 7: Bay culture



Outdoor Bar, Saint John Boardwalk



Hopewell Rocks 37



Reversing Falls, Saint John (NB) 18



Lighthouse, Green's Point (Maine)



Seafood Dining, Billy's Seafood Company Restaurant 11



Fine Dining, Inn on the Cove Restaurant (SJ) 22



Lowtide/Hightide, Bay of Fundy 29



Birdwatching, Atlantic Puffin 30

# Experience preferences of younger persons





Whale Watching, St.Andrews 28

Camping, Public Campground 4



Kayaking, Fundy Trail 38



Sailing on the Bay of Fundy 17



Hopewell Rocks 37



Beach Swimming, Rockwood Park (SJ) 9

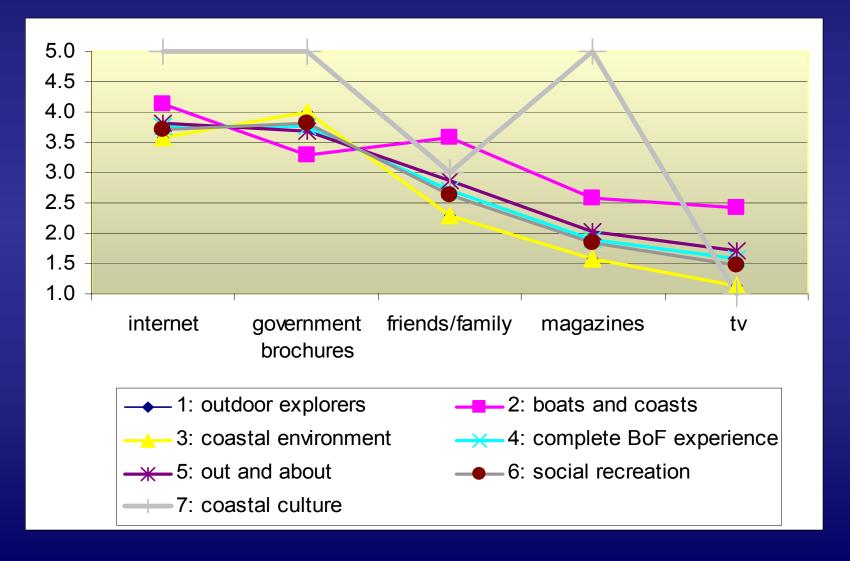


Hiking, Fundy Trail 42



Golfing, Algonquin Golf Course (St. Andrews) 2

# Preferred sources of vacation information



# conclusions

- Two iconic images (whales, Hopewell Rocks) are at the core of the Bay of Fundy destination image
- Summer visitors have sharply differing orientations toward physical outdoor activities, consumption of culture, and preference for landscape experiences
- Travel product development needs to take into account these differing preferences
  - Physical activities for middle-aged people
  - Better complementarities between cultural and environmental experiences
  - Need better support for self-guided experiences and circuits
  - The coastal natural and cultural environment, rather than tides and adventure, are key themes
  - The region is safely exotic
  - The internet and brochures are the preferred sources of information